



healthy heart maintenance

CLINICAL INFORMATION FOR PRACTITIONERS AND PATIENTS

Cardiovascular disease (CVD) is the term used to describe a number of conditions including heart attack and angina (chest pain), stroke, high blood pressure, blood clotting and other heart or blood vessel disorders. Cardiovascular disease is the number one cause of death in western countries - deaths that were largely preventable.

The leading cause of cardiovascular disease is atherosclerosis - the gradual coagulation of blood vessels by fatty or fibrous material. Blocked arteries prevent millions of people from living a full life due to disability.

What Causes Cardiovascular Disease?

The major preventable risk factors for CVD are

- Tobacco smoking
- High blood pressure
- High blood cholesterol
- Insufficient physical activity
- Excess weight and obesity
- Poor diet and diabetes

Risk strongly increases with age and is higher for men and Aboriginal and Torres Strait Islander people. After menopause, women are just as likely to develop cardiovascular disease as men. New research suggests that other factors including depression and social factors may also play a role.

How can I reduce the risk of cardiovascular disease?

Stop Smoking

Smoking can double the risk of heart attack or stroke and is the leading cause of cardiovascular disease. Smoking damages the inside of blood vessel walls. Cholesterol and other materials then accumulate at damaged areas and blood vessels clog up. Smoking lowers the good cholesterol HDL (high density lipoprotein) while raising blood pressure and heart rate and increasing insulin resistance.

The good news is that it is never too late to stop smoking. Cessation reduces the risk of a heart attack by 50 per cent in the first year. Just two years after cessation, the risk is similar to that of a non-smoker. So quit today! Call Quitline on 131 848 or ask your practitioner for helpful advice.

Reduce High Blood Pressure

High blood pressure (hypertension) is a risk factor for both stroke and coronary artery disease. The optimum blood pressure in adults is 120/80. The four critical factors to address are exercise, weight loss, reduced alcohol and salt intake and stress reduction. Several herbs and

nutrients may be helpful. Ask your practitioner about which are most suitable for you.

- **Coenzyme Q10** is stored in the heart, liver and kidneys. Studies have shown that supplementation with CoQ10 may lower high blood pressure without significant side-effects and can be used safely with blood pressure medication
- Several studies show that increased **potassium** intake is associated with decreased risk of stroke and that potassium may lower blood pressure. Potassium is found in all vegetables
- Taking a **magnesium** supplement may help lower blood pressure even in people with normal magnesium levels. It is important to get the mineral balance right. For example calcium supplementation without magnesium may increase the risk of forming a blood clot (thrombosis)
- Treatments may include a combination of heart-protective and relaxing herbs such as **Dan Shen** (*Salvia miltiorrhiza*), **Valerian** (*Valerian officinalis*), **Coleus** (*Coleus forskohlii*) and **Hawthorn** (*Crataegus laevigata*)

People taking statin drugs to control their high cholesterol are advised to take Coenzyme Q10 as statins can cause deficiency of this important nutrient.

Reduce High Cholesterol

High cholesterol is a major risk factor for heart disease. Cholesterol is transported around the body by carriers called lipoproteins. The bad cholesterol LDL (low density lipoprotein) is responsible for carrying cholesterol into the blood vessels. HDL (good cholesterol) transports cholesterol out of the blood stream and into the liver for further processing and elimination. Refer to Healthy Heart Dietary and Lifestyle Tips for ways to improve your cholesterol ratio.

Homocysteine

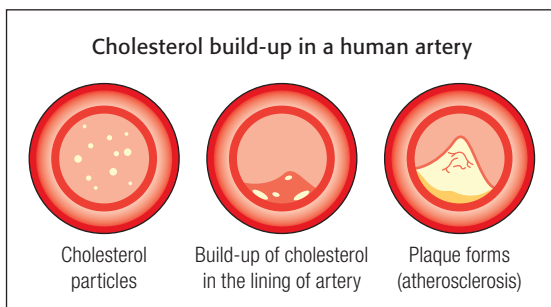
Homocysteine is a toxic byproduct of cell metabolism. It can damage the lining of blood vessels and contributes to clogged arteries. Elevated levels of homocysteine in the blood are associated with increased risk of heart disease. **Vitamins B6, B12 and folate** are essential for metabolism and clearance of homocysteine.

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Atherosclerosis

Preventing or slowing down the clogging of arteries is key in reducing risk of heart attacks and stroke. Rancid or oxidised LDL particles are particularly damaging. Ask your practitioner about herbal and nutritional antioxidants, such as **resveratrol** and **CoQ10**. CoQ10 has been shown to improve the health of blood vessels in people with high cholesterol and those with type 2 diabetes.



The Heart Foundation recommends the following goal for healthy blood lipids:

Lipid	Blood level
LDL-C	<2.5 mmol/L
HDL-C	>1.0 mmol/L
Triglyceride (TG)	<1.5 mmol/L
Total cholesterol	<4.0 mmol/L

The ratio of LDL to HDL is also very important. Lower is better however a ratio of 4:1 is acceptable. Anything higher is likely to greatly increase risk of CVD.

Healthy Heart Dietary and Lifestyle Tips

- Eat plenty of **cereals, fruit, vegetables** and **fish** (or take a fish oil supplement)
- Follow a **Mediterranean-style diet** to improve vascular health and reduce the risk of high blood pressure. The Mediterranean diet is rich in cereals, fruits, vegetables, nuts, whole grains, fish and olive oil; and low in animal fats. Research shows this diet may have benefits for arthritis, Alzheimer's disease, heart health and blood pressure, diabetes, asthma, lung disease and allergies
- **Oily fish** and **omega 3 fish oil** capsules may lower blood fats, reduce blood pressure and reduce risk of most forms of cardiovascular disease. The Heart Foundation recommends daily consumption of 1 g EPA (Eicosapentaenoic acid) and DHA (Docosahexaenoic acid), both found in fish; Plus >2 g alpha linolenic acid (ALA), the oil found in Flaxseed
- **Antioxidants** help protect against the oxidation of blood fats. Eat brightly coloured fruit and vegetables each day for essential antioxidant nutrients. Include plenty of garlic in cooking and drink green tea regularly

- **Walnuts** have been shown to lower cholesterol and should be added to any diet. **Soy** beans also have well-documented benefits in adults such as reducing LDL, total cholesterol and blood fats
- Eating a diet **low in animal fat** can reduce triglycerides (blood fats) and cholesterol
- **Soluble Fibre** can help lower LDL (bad cholesterol), while maintaining HDL (good cholesterol). Soluble fibre is found in fruit and vegetables, legumes, some cereals (eg oats, barley), Flaxseed, Psyllium (*Plantago ovata*), Slippery Elm (*Ulmus rubra*), inulin, acacia and pectin. A combination of fibres is more beneficial than using a single fibre
- **Flaxseed** is a rich source of alpha linolenic acid (ALA), fibre and lignans. Studies have shown ground Flaxseed to reduce lipoprotein (a) and improve insulin sensitivity in adults with high-level blood fats
- **Vitamin K1** (found in green leafy vegetables) may slow hardening of the arteries in people with atherosclerosis. Vitamin K1 plus multivitamin supplementation has also been shown to reduce the progression of coronary artery calcification
- **Control Elevated Blood Sugar.** Diabetes increases the risk of cardiovascular disease and often exists with other factors including high blood pressure, obesity, elevated blood clotting factors, high cholesterol, and high C-reactive protein (a sign of inflammation). There are many herbs and nutrients available to manage healthy glucose metabolism including **Green Coffee** (*Coffea arabica*), **Bitter Melon** (*Momordica charantia*), **Gymnema** (*Gymnema sylvestri*), **chromium, magnesium, zinc** and **biotin**. Ask your practitioner about which are most suited to you
- **Maintain a Healthy Weight.** Obesity is associated with many cardiovascular disorders. The Heart Foundation recommends a waist measurement of ≤94 cm for males and ≤80 cm for females with a BMI (Body Mass Index) of 18.5–24.9
- Remember to **chew your food properly.** Thorough chewing of almonds has been shown to increase absorption of unsaturated fats and suppress hunger for longer. Around 25 chews is best
- **Stay Happy.** Anger, hostility, depression, anxiety, stress and lack of social support have all been associated with increased risk of cardiovascular disease. Take time off, have a massage, join a social club, play a sport, take up dancing, spend time with friends and family and enjoy time outdoors among nature. For stress management, ask your practitioner about herbal treatments such as **Withania** (*Withania somnifera*) or **Rhodiola** (*Rhodiola rosea*)
- **Exercise.** Lack of regular physical activity doubles the risk of coronary heart disease. Regular exercise increases HDL (good cholesterol), lowers high blood pressure, maintains a healthy weight, enhances smoking cessation, improves insulin sensitivity and makes you happier! Exercise for 30 minutes on most or every day of the week

References available at www.nutrmedicine.com

